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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/911,143	07/23/2001	Hidenori Wada	10873.772US01	4482

7590 07/12/2005  
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EXAMINER

ORTIZ CRIADO, JORGE L

ART UNIT PAPER NUMBER

2655

DATE MAILED: 07/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/911,143

Applicant(s)

WADA ET AL.

Examiner

Jorge L. Ortiz-Criado

Art Unit

2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 27-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 27-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date Apr 2005
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

4/4/05; 2/20/05

## DETAILED ACTION

### *Information Disclosure Statement*

1. The information disclosure statements filed on 04/04/2005 and 02/20/2005 have been considered and made of record.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 27-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 27 recites “a multilayer optical recording medium comprising...” and further recites “a recording layer “A” as an only one recording layer of a single-layer recording medium...”

It is unclear with the above claim language if the recording medium claimed contains plurality of recording layers or a single recording layer.

**As far as the claims recite positive limitations, the following art rejections are made.**

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

27-31

4. Claims ~~27-29 and 31~~ are rejected under 35 U.S.C. 103(a) as being unpatentable by Kashiwagi U.S. Patent No. 6,175,548 in view of Applicant's admitted prior art (AAPA).

Regarding claim 27, Kashiwagi discloses A multilayer optical recording medium comprising a plurality of recording layers and a surface on which a laser light is incident for recording or reproduction, with respect to which information is recorded or reproduced using an optical recording/reproducing apparatus that is capable of recording and reproducing information with respect to (See Abstract):

(a) a recording layer "A" as only one recording layer of a single-layer recording medium on which information is recorded by irradiation with a laser beam, where a distance from a surface of the single-layer recording medium on a side where the laser beam is incident to the recording layer "A" is approximately 100  $\mu\text{m}$ . (See col. 1, line 59 to col. 2, line 36; col. 3, line 64 to col. 4, line 41; Figure 1)

(b) each layer of a plurality of recording layers of the multilayer optical recording medium on which information is recorded by irradiation with a laser beam; (col. 1, line 59 to col. 2, line 36; col. 3, line 64 to col. 4, line 41; Figure 2)

the optical recording/reproducing apparatus being provided with a light source emitting light with a wavelength of 490 nm to 420nm, and an optical head including an objective lens with a NA of 0.7 to 0.9. (col. 1, line 59 to col. 2, line 36; col. 3, line 64 to col. 4, line 41; Figure 2)

wherein a distance from the surface of the multilayer optical recording medium on which the laser is incident to one of the plurality of recording layers is approximately 100  $\mu\text{m}$ . (col. 1, line 59 to col. 2, line 36; col. 3, line 64 to col. 4, line 41; Figure 2)

Kashiwagi does not expressly disclose a spherical aberration correction means in the optical recording/reproducing apparatus.

This feature is well known in the art and is evidenced by Applicants admitted prior art which discloses an optical recording medium with a recording layer on which information is recorded by irradiation with a laser beam, where a distance from a surface recording layer recording medium on a side where the laser beam is incident to the recording layer "A" is approximately 100  $\mu\text{m}$ , an optical recording/reproducing apparatus being provided with a light source emitting light and a spherical aberration correction means (see page 1, line 26 to page 3, line 9)

It would have been obvious to one with an ordinary skill in the art at the time of the invention to provide a spherical aberration means in order to correct aberrations caused by the shortened wavelength and large NA and difference in thickness of the optical recording medium.

Regarding claim 28, the combination of Kashiwagi with AAPA shows comprising no more than two recording layers (See Kashiwagi Fig.2)

Regarding claim 29, the combination of Kashiwagi with AAPA shows wherein a distance from the surface of the optical recording medium to a first recording layer is approximately 100 $\mu$ m, and a distance from the surface of the optical recording medium to a second recording layer is larger than 100 $\mu$ m (See Fig. 2, col. 2, line 36; col. 3, line 64 to col. 4, line 41)

Regarding claim 31, the combination of Kashiwagi with AAPA shows wherein administrative information of the optical recording medium is recorded at a position of approximately 100 $\mu$ m from the surface of the optical recording medium (“ the information is recorded in the **recording layer** at a position of approximately 100 $\mu$ m (See Kashiwagi col. 2, line 36; col. 3, line 64 to col. 4, line 41)

Regarding claim 30, the combination of Kashiwagi with AAPA shows that wherein a distance from the surface of the optical recording medium to a first recording layer is approximately 100 $\mu$ m, and a distance from the surface of the optical recording medium to a second recording layer is larger than 100 $\mu$ m and wherein the distance relationship from the surface of the optical recording medium to the first and the second recording its larger or smaller to approximately 100 $\mu$ m. (See Kashiwagi col. 2, line 36; col. 3, line 64 to col. 4, line 41)

It would have been obvious of matter of design choice to modify the Kashiwagi by having a distance from the surface of the optical recording medium to a second recording layer

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smaller than 100 mum since applicant has not disclosed that having the specific smaller distance to the second recording layer solves any sated problem or is for any particular purpose.

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 27-31 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jorge L. Ortiz-Criado whose telephone number is (571) 272-7624. The examiner can normally be reached on Mon.-Thu.(8:30 am - 6:00 pm),Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne R. Young can be reached on (571) 272-7582. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

joc

W. R. YOUNG  
PRIMARY EXAMINER